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Habitat.—Barbadoes. Types in my collection, obtained from Mr. A. H. Alexander, by whom they were killed on that Island.

Remarks.—This very distinct species comes nearest to *Q. lugubris*, Sw., in its dimensions, but is rather smaller; that species is more violaceous in luster, with longer and stouter legs, also a longer, straighter and more feeble bill. with the commissure straight; the bill of the new species is comparatively large, at the base being wider and fully one-third higher than that of *Q. lugubris*.

4. *THAMNOPHILUS VIRGATUS*.

Entire head, hind neck and all of the under plumage, of a grayish fuliginous color, blacker on the head and grayer below, with a broad stripe of pale ochreous white down the centre of each feather; these are clearer or nearly white on the head, and duller on the abdomen; back, tail and exposed portion of the wings cinnamon red; the inner webs of the quill feathers liver brown; the under wing coverts and inner margins of quills pale cinnamon; under tail coverts pale rufous; upper mandible black, the under whitish horn color; tarsi and toes black, claws whitish.

Length about 6 in.; wing 3; tail $2\frac{1}{2}$; bill about $\frac{1}{2}$; tarsi 1.

Habitat.—New Granada, Turbo. Collected by Lt. Michler. Type in Mus. Acad. of Nat. Sciences, Philadelphia.

Remarks.—In distribution of colors this species much resembles *T. palliatus*, but it is smaller and differs notably in the white markings throughout, being longitudinal; the crown in *palliatus* is immaculate, on which in the present species the stripes are strongly defined; the red coloring is paler and duller than that of *T. palliatus*.

From analogy I judge it to be a male, as the female of *T. palliatus* has a rufous crown.

The bill is injured by shot, the end being deficient; at first I was puzzled to know where to place it, but feel confident it is assigned its true position.

Analytical table of the Species of *BARIDIUS* inhabiting the United States.

BY JOHN L. LE CONTE, M.D.

According to the form of the antennæ the species before me may be divided into three principal groups, of which the second contains all the strongly pubescent species. The first group is the most numerous, and may again be subdivided by the presence or absence of the apical constriction of the prothorax. We will thus have the following scheme of arrangement.

A. Antennæ thick; 2d and 3d joints of funiculus equal.

a. Body nearly glabrous. Thorax not constricted near the apex. Sp. 1—8.

b. Body nearly glabrous. Thorax constricted near the apex. Sp. 9—22.

c. Body densely pubescent; thorax constricted near the apex. Sp. 23—25.

B. Antennæ slender; 2d point of funiculus longer than the 3d. Sp. 26—28.

A—a.

Intervals of elytra coarsely and irregularly punctured. 1.

“ “ with single rows of usually well marked punctures. 3.

“ “ with very fine inconspicuous punctures. 4.

1. Color black. 2.

Color bronze-black; prothorax longer than wide, gradually narrowed from base, rounded near the apex; dorsal carina very indistinct; beak stout, curved, moderately long, punctured. Long. 4.5 mm. Middle States. 1. subæneus.

2. More shining; prothorax not longer than wide, very slightly narrowed from base, much rounded near the apex; dorsal carina not apparent; beak stout, short, curved, punctured. Long 4.5 mm. Kansas (one specimen).

2. quadratus.

Similar to the last in size, form and sculpture, but the dorsal carina of the prothorax is well marked. Long 4.5 mm. Texas, Illinois. (Two specimens) 3. *carinulatus* *Lec.*

Less shining; punctures of elytra smaller and closer; prothorax more equally rounded on the sides, not broader than long, without dorsal carina; beak moderately long, stout, curved, punctured. Long. 4.5 mm. Kansas. (2 specimens)..... 4. *transversus* *Say.*

3. Black bronzed, shining; prothorax not longer than wide, very slightly narrowed from the base, much rounded near the tip, dorsal carina not obvious. (Resembles *B. subæneus*, but differs by the more full thorax, rather stouter form, and less irregular interstitial punctures of the elytra.) Long. 4—4.5 mm. Middle and Southern States..... 5. *tumescens*.

Smaller, black bronzed, shining; prothorax not longer than wide, more obliquely narrowed at tip and less rounded, dorsal carina not obvious; elytral striæ less strongly punctured than in *B. tumescens*; intervals with rows of well marked or very fine punctures. Long. 3 mm.... 6. *confinis*.

Black bronzed, very shining, prothorax more sparsely punctured, slightly narrowed from the base, broadly and obliquely rounded near the tip; elytra more finely and less deeply striate, intervals wider, nearly smooth. Long. 2.5—3 mm. Louisiana..... 6. *aereus* *Sch.*

4. Bluish black, shining; prothorax not longer than wide, obliquely narrowed from the base, broadly rounded near the tip, punctures more distant than usual, dorsal carina not obvious; elytral striæ scarcely perceptibly punctured, interstices nearly smooth, or with rows of very small punctures. Long. 4.25—4.75 mm. Middle and Southern States; five specimens. (Differs from *B. aereus* in color and in form of prothorax.) 7. *interstitialis* *Say.*

Black, shining; body narrow, prothorax longer than wide, sides broadly rounded in front, disc strongly punctured, without dorsal carina; elytra with a feeble oblique impression near the base, striæ scarcely punctured; interstices with rows of very fine punctures. Long. 3.5 mm. California; two specimens; San Francisco..... 8. *macer* *Lec.*

A—b.

(The beak is longer and more slender than in A—a, and the thorax is transversely impressed near the tip, at least on the sides.)

Prothorax at base nearly as wide as the elytra.

1.

Prothorax at base narrower than the elytra; black, shining, very coarsely sculptured, elytral intervals not wider than the striæ, and marked with single rows of deep punctures. Long. 5.5—6.5 mm. Illinois, Kansas, Arizona.

9. *striatus* *Say.*

1. Body nearly glabrous, color black,

2.

“ “ color bright brown,

8.

Body rather robust and convex, brownish black, more pubescent than usual; prothorax wider than long, gradually narrowed from the base and feebly rounded on the sides; elytral intervals with rather confused rows of somewhat transverse punctures. Long. 4—5 mm. Kansas. (Resembles in appearance a *Centrinus*). 10. *farctus*.

Body robust, black, more pubescent than usual, prothorax wider than long, feebly narrowed from the base, sides much rounded in front almost straight behind, very densely and coarsely punctured, with a slender carina; elytral intervals wider than the striæ, densely and confusedly punctured. Long. 4 mm. California, 3 specimens. S. Diego..... 11. *densus* *Lec.*

2. Prothorax with distinct smooth dorsal line.

3.

“ “ without “ “

6.

3. Elytral intervals usually not wider than the striæ, with rows of very strongly marked punctures; body larger and wider.

4.

Elytral intervals wider than the striæ, with single rows of finer shallow punctures; body smaller and narrower.

5.

[Dec.

4. Prothorax gradually narrowed from the base, broadly rounded on the sides, more strongly towards the tip, coarsely punctured, the punctures more distant than the length of their diameters; (elytral intervals and striæ as in *B. striatus*; resembles *B. carinulatus*, but the prothorax is distinctly impressed on the sides near the tips,) Long. 6 mm. Kansas and Wisconsin..... 12. *strenuus*.

Resembles the preceding in form and sculpture, but the punctures of the prothorax are larger and more distinctly umbilicated, and the sides more deeply constricted near the tip. Long. 5 mm. Penna., one specimen; Mr. Rathvon..... 13. *umbilicatus*.

Somewhat narrower and more regularly oval, prothorax gradually but more strongly narrowed from the base, and more obliquely rounded near the tip, less coarsely but somewhat more densely punctured than in *B. strenuus*; elytra with the intervals wider than the striæ, with rather confused rows of fine but well marked punctures. Long. 6 mm. Wisconsin, 1 specimen.

14. *subovalis*.

5. Punctures of prothorax more distant than their diameter, sides scarcely narrowed from the base, more broadly rounded near the tip, dorsal line wide; elytral intervals wider than the striæ with rows of distant large shallow punctures. Body less convex than usual. Long. 3.5 mm. New Mexico, 1 specimen..... 15. *distans*.

Prothorax more densely punctured, sides slightly narrowed from the base, more obliquely rounded near the tip and more distinctly constricted; elytra as in the preceding, but with a small white pubescent basal spot each side, and a few scattered white scale-like hairs. Long. 3—4 mm. Southern States, 3 specimens..... 16. *nigrinus* Say.

6. Body oval or elongate. 7.

Body broadly ovate, black shining, prothorax wider than long, strongly but not densely punctured, with very feeble dorsal carina, sides narrowed from the base, strongly rounded in front, and deeply constricted near the tip; elytral intervals wider than the striæ, with rows of small but deep punctures. Long. 2.5—3 mm. Middle States, 4 specimens..... 17. *ovatus*.

7. Body oval, black shining, prothorax not wider than long, strongly and densely punctured, without dorsal carina, sides narrowed and broadly rounded from the base, slightly constricted near the tip; elytral intervals broad, with rows of very fine but well marked punctures. Long. 2.5 mm. Middle States, 2 specimens..... 18. *pusillus*.

Body elongate oval, black, less shining, prothorax longer than wide, more coarsely punctured, punctures less distant than the length of their diameters, without dorsal carina, sides converging from the base, rounded only near the apex, which is feebly constricted; elytral intervals a little wider than the striæ, with rows of well marked punctures, disc feebly impressed obliquely each side behind the shoulder. (Of the same form as *B. macer*, but otherwise quite distinct. It differs remarkably from all the others of this division by the 2d joint of the funiculus of the antennæ being somewhat longer than the 3d, though much less conspicuously than in the species of division *B.*) Long. 3—3.5. Illinois and Kansas. 5 specimens... 19. *angustus*.

Also slender in form, black, not very shining, prothorax punctured as in the preceding, with the sides not converging from the base, but parallel, and more strongly rounded in front, tip feebly constricted; elytral intervals wider than the striæ, with rows of well marked punctures. (Resembles *B. macer*, but the thorax is more full in form, more densely punctured, and is feebly constricted at the tip; the beak is also longer and more slender.) Long. 2.5 mm. California, 1 specimen. San Francisco..... 20. *seriatus* Lec.

Somewhat less slender, bronzed black, shining, prothorax scarcely larger than wide, narrowed from the base and feebly rounded on the sides except 1868.]

near the tip, where it is more strongly rounded and slightly constricted disc, coarsely but more sparsely punctured than usual, punctures more distant than the length of their diameters; elytral striæ impunctured, intervals much wider than the striæ, with single rows of small punctures. Long. 3 mm. One specimen, Oregon..... 21. *sparsus*.

8. Body elongate, bright brown, very shining, prothorax rather sparsely punctured with a broad undefined smooth medial line; elytral uneven, with a transverse impression before the middle, an oblique one behind the humeri, and a very faint one behind the middle; striæ feebly punctured, intervals much wider than the striæ, with scarcely perceptible rows of very fine punctures. Long. 3 mm. Ohio and Illinois; (depredates on grape vine, producing the gall described by Mr. Walsh as *vitiscurrus*.).... 22. *Sesostriis*.*

A—c.

The species contained in this group are of a slender form like some of those in b, and like them have an elongated moderately slender beak; the antennæ are not quite so stout, though the 2d joint of the funiculus is not conspicuously longer than the 3d. The body beneath is densely clothed with depressed ash colored hairs, and is equally densely pubescent above. The prothorax is constricted near the tip, and the disc is strongly and densely punctured with a slightly elevated dorsal line. The species of this group have the last tarsal joint more elongated than in the other species of the genus, and the claws closely approximated, and somewhat connate at base; the males are also distinguished by the last ventral segment being armed at tip with a small tooth. These differences, combined with those of appearance, produced by the dense covering of hair, would indicate the propriety of separating them as a distinct genus.

Prothorax feebly constricted near the tip. 1.
" more strongly " " " 2.

1. Small, pubescence less dense, prothorax longer than wide, feebly narrowed in front, slightly rounded on the sides, and feebly constricted near the tip, without basal glabrous spots. Long. 3 mm. Maryland, 1 spec..23. *plumbeus*.

Larger, pubescence very dense, prothorax very little longer than wide, gradually narrowed in front, slightly narrowed on the sides, and feebly constricted near the tip, with three basal glabrous black spots extending upon the scutellum and base of elytra. Long. 4.5 mm. Atlantic States, abundant..... 24. *trinotatus* Say.

2. Larger, pubescence dense, prothorax scarcely longer than wide, subtrapezoidal gradually narrowed from the base, sides nearly straight, suddenly rounded near the tip and more strongly constricted, coarsely and densely punctured, distinctly carinated, marked with basal spots as in the preceding. Long. 4.5—6 mm. California, also at Cape San Lucas, 3 spec.

25. *mucoreus* Lec.

B.

The species of this division have the beak longer and more slender than those of A, and the antennæ are much thinner, the 2d joint of the funiculus is much longer than the 3d, thus showing an approach to *Centrinus*, which these species resemble in their form; the body is nearly glabrous, and the prothorax is constricted near the tip.

The three species before me may be distinguished as follows:

Body black, somewhat shining, prothorax strongly punctured, without dorsal carina, gradually and strongly narrowed from the base, and rounded on the sides; elytral intervals with single rows of strongly marked punctures, humeri scarcely wider than the base of prothorax. Long. 3.5 mm. Kansas, one specimen. 26. *nasutus*.

* Vide Herodotus, Euterpe, cap. 102.

Body black, shining, prothorax as in the preceding, elytra at humeri distinctly wider than base of prothorax, intervals with confused fine punctures. Long. 3·5—4·5 mm. Southern States, 4 specimens. (Rather stouter in form than the preceding, and resembling almost exactly *B. farcus*, but quite different by the antennæ and beak.)..... 27. *ibis*.

Body brown, shining, prothorax longer than in the preceding and less rounded on the sides, more densely punctured with a faint dorsal carina; elytra at humeri distinctly wider than base of prothorax, intervals with confused fine punctures. Long. 3·5 mm. Georgia and Illinois, 4 specimens.

28. *scolopax Say*.

Bibliography.

B. carinulatus Lec. Proc. Ac. Nat. Sc., Phila., 1858, 79.

B. transversus Say. Curc. 18; ed. Lec. i, 282.

B. aereus Sch. Curc. viii, 141.

B. interstitialis Say. Curc. 18 and 26; ed. Lec. i, 282, 295; Journ. Acad. N. S. Ph. iii, 314; ed. Lec. ii, 176; *Sch.* iii, 684; viii, 149. In well preserved specimens small scale-like hairs are perceived in the rows of punctures on the elytral intervals.

B. macer Lec. Rep. Pac. R. R. Expl. xi, MS. 58.

B. striatus Say. Curc. 17; ed. Lec. i, 281.

B. densus Lec. Proc. Ac. Nat. Sc., Phila., 1859, 79.

B. nigrinus Say. Curc. 31; ed. Lec. i, 295. *Sch.* Curc. iii, 691; viii, 154.

B. seriatus Lec. Rep. Pac. R. R. Expl. xi, MS., 58.

B. trinotatus Say. Curc. 7; ed. Lec. i, 280; *vestitus*† *Sch.* Curc. iii, 718.

B. mucoreus Lec. Proc. Ac. Nat. Sc., Phila., 1858, 79.

B. scolopax Say. Curc. 26; ed. Lec. i, 295; *Sch.* Curc. iii, 699. I do not know for what reason Schönherr has referred this species to his first division; Boheman, in the description, mentions the antennæ as *minus crassæ*, which in fact they are.

Species unknown to me.

B. T-signum Sch. Curc. viii, 154.

B. anthracinus Sch. Ibid, iii, 727. Seems to be near 28. *ibis Lec.*

B. confertus Sch. Curc. iii, 728.

B. californicus Motsch. Bull. Mosc. 1845, ii, 372.

B. pubescens Uhler, Proc. Ac. Nat. Sc., Phila., 7, 417 belongs to *Centrinus* and is *C. pistior Sch.* = *Balaninus pistior Germ.*

The GYRINIDÆ of America, north of Mexico.

BY JOHN L. LE CONTE.

Species of this family are found in every part of the United States and contiguous northern regions, usually in large colonies; from their whirling motion of the surface of the water they are popularly known as *whirligigs*, and, on account of the agreeable fragrant odor of some of the species, as *apple-bugs*.

There is a remarkable uniformity of appearance in the species of each genus, which renders their definition and recognition somewhat difficult; for this reason, notwithstanding the very curious structural characters displayed in their organization, which are detailed in all systematic works, they are not favorites with collectors, and many of our species have remained unnamed.

Three genera are represented in our fauna:

Last ventral segment depressed, rounded at tip:

Scutellum distinct; labrum transverse..... *Gyrinus*.

Scutellum invisible; labrum transverse..... *Dineutus*.

Last ventral segment elongated, conical:

Scutellum invisible; labrum prominent.... *Gyretes*.

1868.]